

7. Monitoring

Monitoring will be required to ensure conformation to agreed guidelines and to assess efficacy of mitigation measures such as weed control.

Measures designed for the protection of wildlife in road construction projects are being considered and implemented in concurrent projects in various Australian states. However, a lack of post-construction monitoring has meant that the effectiveness of these sometimes expensive measures has not been able to be assessed. As part of the present project, a commitment should be made to monitor the post-construction success of measures adopted.

7.1 Weeds

Monitoring should include:

- documentation of the extent of weed invasion subsequent to construction;
- documentation of the species colonising disturbed areas, in particular those species known to be aggressive invaders of natural areas;
- implementation of weed eradication strategies where appropriate.

7.2 Koalas

Koala monitoring should be aimed at determining the effectiveness of Koala protection measures through measurement of road mortality and use of underpasses. Koala monitoring has been considered in more detail in Appendix I.

7.3 Fencing

Monitoring should include:

- detection and repair of breaches in the fence;
- maintenance of fencing to keep it clear of climbing plants and fallen branches;
- systematic monitoring of road-kills along the highway upgrade;
- identification of road-kill hot-spots (if any);
- modifications of fencing as required.

7.4 Wildlife Underpasses

Monitoring of any bridged underpasses should include recording of road-kills within or near the underpass and of ground-dwelling fauna using the underpasses. Possible techniques include:

- replicated hair-tube surveys;
- replicated scat collection surveys;
- infra-red triggered video monitoring;
- foot-print identification using sooted paper or similar techniques.

Modifications of existing fences at approaches to underpasses should be undertaken if road-kill rates in or near underpasses are unacceptable. Assessment of whether road-kill mortality rates are too high must incorporate consideration of numbers of animals successfully using the underpasses.

7.5 Aquatic Habitats

Monitoring should include:

- measurement of quantity and quality of discharge of water from detention basins;
- flow regimes of creeks and other watercourses immediately downstream of the proposal;
- water quality measurement during and post construction downstream of the proposal.